preparation, to ensure that college matriculation is an obtainable goal for all Scholars. Fully 95 percent of Scholars who complete the 14-month preparation program graduate from high school, and 96 percent of Scholars who graduate from high school enroll in a four-year college or university.

Through further discussions with Steppingstone, Mayor Perez and other members of the HYSF board, including Trinity College President Jim Jones, determined that adapting a tested and replicable program model was not only good for Hartford students and families, but also made good business sense. Citing Steppingstone's record of getting kids into college and helping negotiate financial aid packages, Perez concluded the program "will resonate with Hartford families."

As a result of a formal partnership with the foundation, HYSF will launch the Steppingstone Academy Hartford this summer with its first class of eighth-grade students. Middle school teachers and guidance counselors from the Hartford Public Schools have already nominated more than 450 students for one of the 30 spots in the

Academy's pilot class. Upon acceptance, Steppingstone Scholars in Hartford will spend the following 14 months preparing for placement into and success at one of more than 20 partner independent schools in Connecticut, including day and boarding schools, single-sex schools and Catholic schools.

While many mayors and community leaders might not include independent schools in a campaign to increase college access, Perez, HYSF and the Steppingstone Foundation have provided a model of public/private partnership for other cities with clusters of collegeprep-oriented independent schools to follow. As one initiative within a larger campaign to increase college access in Hartford, independent schools serve as an important resource to help city leaders address the achievement gap, while contributing to the portfolio of school options available to Hartford students and families.

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What's in Your Valise?

Determining What Students Learn in College

CLIFFORD ADELMAN

hat would we think of U.S. higher education if we knew that 59 percent of bachelor's degree recipients completed two or more courses in college-level mathematics such as statistics or calculus? Or that 35 percent completed a writing course beyond freshman composition, a course such as technical writing, creative writing or journalism? Would we think better of our business majors if we knew that 84 percent crossed that two college-level math course threshold and better of our chemistry, physics, and geology majors if we knew that 55 percent crossed the advanced writing threshold? If we asked students what's in their knowledge valise when they leave college, would we consider these markers to be sufficient evidence of quantitative and communication skills?

I didn't make these numbers up: they come from the transcripts of college graduates in the most recently completed national longitudinal study conducted by the U.S. Department of Education. They are what is

called "unobtrusive evidence," generated in the natural course of students' higher education. Transcripts don't lie, and common sense would hold the data to be transparent markers of achievement. Sure, a calculus course at MIT is not the same as a calculus course at Old Siwash, but it's still calculus. A journalism course at Northwestern is not the same course as that delivered at Greentree Valley Community College, but they both have freshman composition as a prerequisite. We can do better, particularly in evidence of writing attainment, but with data such as those cited, do we need a test to prove it? If we do, then what kind of test?

The issue of how we determine what college students learn and who might report the answer to that question didn't arise yesterday, though the recent report of U.S. Education Secretary's Commission on the Future of Higher Education treated it like the discovery of a new planet. The Commission report grabbed everything that crossed its selective radar screen, every test or survey that someone told them did the job, and beat up on the higher education accrediting bodies for not doing enough to make sure that colleges provide sufficient evidence that something positive happened inside their students' heads. Continuing down this narrow road will not

produce a satisfactory answer to the question. Accountability for student learning in higher education is not an extension of No Child Left Behind, certainly not in the hands of an Education Department which, when Congress first proposed the Academic Competitiveness Grants for supplementary awards to needy students who completed a "rigorous" high school curriculum, had to send an email bouncing down through the bureaucracy to find out what an academically challenging high school curriculum meant (the email landed on my former desk at the Department). A few months later, another bouncing bureaucracy e-mail asked whether there was any high school math between algebra 2 and calculus. As the IM generation would respond, "OMG!"

These indicators respect the central role of the academic disciplines and academic faculty in setting standards for the real stuff of degrees ... and tell employers what they can expect of all graduates.

There are three tensions behind the debate on the evidence of what college students learn that might have been more thoughtfully addressed by this commission report before it rattled off its preferred solutions and implicit threats: 1) Are we judging the student or the institution(s) the student attended? 2) Are we content with samples of students or do we demand that all students are accounted for? 3) Do we want the results in statements that fit on bumper stickers or those that reflect the complex kingdom of knowledge through which college students move on their way toward degrees?

Having studied and participated in the massification of assessment in U.S. higher education that was spurred by the last time the Department of Education sponsored a national report on higher education (1984), I come down on the side of two transparent, public, high-stakes markers—one for graduating students and one for the institution from which the students graduate—both based on the performance of all students, not just samples.

First, a revival of the comprehensive examination in the major, required of students as a condition of graduation, with the previous year's comprehensive exams posted publicly by the institution. This requirement would apply to occupationally oriented associate degrees granted by community colleges as well as for all bachelor's degree fields. It would apply, with appropriate variations, in what I call the "conservatory fields," e.g. fine and performing arts, where exhibits, portfolios or performances carry the evidence of student learning. In applicable disciplines, an institution could use the GRE field tests, with subtest scores weighted to reflect the distribution of the delivered curriculum in that institution's departments.

In February, Texas Gov. Rick Perry proposed that public four-year colleges in his state use the ETS Major Field tests for this purpose, but those exams (like the GRE field tests) cover but a fraction of majors in which degrees are granted. They are also too limited in coverage, they don't allow for subtest weighting and, chances are, they have not undergone a review of their content in a decade. Nice try, Governor, but no cigar! The home-grown comprehensive exam, made public with its scoring criteria, is the strategy of preference and provides each department with the opportunity for serious reflection on what it expects of its majors and a chance to show off. This requirement is no different, really, from licensure or certification examinations given to students entering occupations such as accounting, teaching, nursing, engineering and architecture—that do not require graduate or first professional degrees. This requirement is student-centered, high-stakes and accounts for all degree candidates. No pass, no play; or, better still, take it until you pass! If My Cousin Vinnie passed the bar exam on the sixth try, so can you!

Second, a report from the institution, based on the transcripts of all graduates in a given year, citing the proportions who had reached key thresholds of knowledge and skills deemed essential by the institution's faculty, documented by completed coursework wherever that coursework was done (since 60 percent of our bachelor's degree recipients attend more than one school along the way, we have to acknowledge all qualifying coursework). The examples of college-level mathematics and advanced writing cited above are illustrative. Faculty at each institution can select other "gateways" for similar coursework documentation. Challenge exams, e.g. in foreign languages, can and should be counted in lieu of coursework.

Both of these indicators respect the central role of the academic disciplines and academic faculty in setting standards for the real stuff of degrees. Both of these indicators tell employers what they can expect of the knowledge and skills of all graduates (not just a sample) from Old Siwash University and Greentree Valley Community College. Most importantly, the content reflected in the comprehensive exams and the gateway courses is what your sons and daughters talk about learning at the family dinner table, and reflects the knowledge they will take into economic and community life. When asked, "What's in your valise?" it's the content they are proud to show off. If we want a vibrant economic and community life, content makes the difference.

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